transformed how basic science is done. Scientists are using CRISPR to ask fundamental questions about life, such as which genes are essential to a cell's survival. Doctors are testing it as a cure for genetic conditions such as sickle cell disease and hereditary blindness, and plant scientists are using it to create new crops.

People in my home State of Illinois are especially proud of Andrea Ghez, a 2020 Nobel physics laureate who grew up in Chicago and was encouraged to pursue a career in science by a gifted teacher at the University of Chicago Laboratory School.

Dr. Ghez, director of the UCLA Galactic Center Group, received the Nobel for her pioneering research on the supermassive black hole at the center of our galaxy. She describes her research as ''extreme astrophysics.'' Her discoveries have enabled scientists to explore black holes and their fundamental role in the evolution of the universe.

Dr. Ghez and her team conduct their research at the W.M. Keck Observatory in Hawaii. She is only the fourth woman to receive the physics prize. She shares half of the prize with Reinhard Genzel of UC Berkeley and the Max Planck Institute for Extraterrestrial Physics in Berlin. The other half of the prize was awarded to Roger Penrose of the University of Oxford.

Dr. Ghez has earned numerous honors for her research, including election to the National Academy of Sciences and the American Academy of Arts and Sciences. In 2019, she was awarded an honorary degree by Oxford University.

When she was a girl, she wanted to be the first woman to walk on the moon. She attributes her love of science partly to a woman who taught her nearly 40 years ago at the University of Chicago Laboratory School. Judith Keane was the only woman in the Lab School's physical sciences department. Dr. Ghez has said how important it was for her to see a woman in that role.

For much of history, women's involvement in science has been discouraged and their achievements have been ignored. Nevertheless, they have persisted. A few examples:

In 1903, Marie Curie became the first woman to win the Nobel Prize for Physics, for her discovery of radioactivity. She won the Nobel Prize in Chemistry 8 years later for her work in isolating pure radium. She remains the only woman in history to ever win the Nobel twice and the only human to ever win a Nobel Prize in two different sciences.

Rachel Carson was a marine biologist and environmentalist whose groundbreaking book, ''Silent Spring,'' helped launch the modern environmental movement.

Rosalind Franklin, a British chemist and molecular biologist, was one of the key figures behind unlocking the structure of human DNA, although her contributions went largely unrecognized.

Barbara McClintock was an American geneticist and the only woman ever to have been awarded the Nobel Prize for Medicine by herself. In 1993 she won the the Nobel Prize for her discovery of the ''jumping gene'' or the ability of genes to change position on the chromosome.

Ruth Rogan Benerito was a chemist and pioneer in bioproducts who spent most of her career at the U.S. Department of Agriculture. She is credited with saving the cotton industry in post-WWII America through her discovery of a process to produce wrinkle-free, stain-free, and flame-resistant cotton fabrics.

Navy Rear Admiral Grace Hopper first developed computer languages and a compiler to translate them into machine code. She developed computer languages written in English, rather than mathematical notation, including COBOL, which is still in use today.

Katherine Johnson was an African-American mathematician and NASA space scientist who made enormous contributions to America's space programs by her incorporation of computing tools. She calculated key trajectories for America's first manned space flight and for the 1969 Apollo 11 flight to the moon.

Mae Jemison is a physician, chemist, biologist, and a former NASA astronaut. As a girl growing up on the South Side of Chicago, she was inspired to become an astronaut after watching Star Trek's Lt. Uhuru, the only Black woman aboard the Starship Enterprise. In 1992, she became the first Black woman to travel into space.

Despite the achievements of these and other women, the tradition in science of excluding women and other underrepresented groups at prestigious scientific meetings and conferences is so pervasive that some scientists sometimes refer wryly to such panels as ''manels.''

Dr. Francis Collins is director of the National Institutes of Health and a brilliant scientist. In June 2019, he announced that he would no longer speak at any science conference where women and other minority scientists were not included. He challenged other leaders in bioscience to do the same. Fortunately, some are. More should. As I said, we need all hands on deck.

I will close with this. About a week after the 2020 Nobel Prizes announcements, the winner of the 2020 3M Young Scientist Challenge was announced. That is the Nation's top science prize for middle schoolers. It carries a $25,000 award.

The winner this year is a 14-year-old Indian-American girl from Frisco, TX, Anika Chebrolu. Two years ago, she began studying the Spanish Influenza of 1918 that killed at least 50 million people worldwide. Last year, she came with a bad case of the seasonal flu herself and threw herself into finding a cure. She discovered a molecule that may lead to the development of a new antiviral drug to treat COVID. The molecule binds to the spiky protein of the novel coronavirus and inhibits the spread of the virus into human cells.

Supporting the achievements of girls and women in STEM fields can help solve some of the greatest afflictions of our time and solve some of the deepest mysteries of our universe. It is a profoundly wise investment. Congratulations to the new women Nobel science laureates of 2020. May there be many more who follow in their footsteps.

(At the request of Mr. DURBIN, the following statement was ordered to be printed in the RECORD.)

VOTE EXPLANATION

● Mr. TESTER. Madam President, I was absent due to a family health matter requiring my attention when the Senate voted on vote No. 226 on confirmation of Executive Calendar No. 865, James Ray Knepp II, of Ohio, to be United States District Judge for the Northern District of Ohio. On vote No. 226, had I been present, I would have voted yea.●

ARMS SALES NOTIFICATION

Mr. RISCH. Madam President, section 36(b) of the Arms Export Control Act requires that Congress receive prior notification of certain proposed arms sales as defined by that statute. Upon such notification, the Congress has 30 calendar days during which the sale may be reviewed. The provision stipulates that, in the Senate, the notification of proposed sales shall be sent to the chairman of the Senate Foreign Relations Committee.

In keeping with the committee's intention to see that relevant information is available to the full Senate, I ask unanimous consent to have printed in the RECORD the notifications which have been received. If the cover letter references a classified annex, then such annex is available to all Senators in the office of the Foreign Relations Committee, room SD–423.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

DEFENSE SECURITY COOPERATION AGENCY,
Arlington, VA.

Hon. JAMES E. RISCH,
Chairman, Committee on Foreign Relations, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 20–73 concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Australia for defense articles and services estimated to cost $46 million. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

HEIDI H. GRANT,
Director.

Enclosures.

TRANSMITTAL NO. 20–73

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) Prospective Purchaser: Government of Australia.